

ATTACHMENT 3
AREA OF POTENTIAL EFFECTS DELINEATION

In accordance with stipulations VI.B.7 and VIII.A, Caltrans, under the authority of FHWA, will establish the Area of Potential Effects (APE) for undertakings covered by this Agreement. The Caltrans PQS and project manager are jointly responsible for describing and establishing an APE and will sign any maps or plans that define or redefine an APE.

When the guidelines below are followed, specific consultation with the SHPO regarding APE and level of effort will typically not be necessary. Consultation with the SHPO may be needed for large and complex undertakings, when there are issues of access for inventory and evaluation, when there are concerns over delineating whole properties, or when there is public controversy such as potential for litigation, concerns expressed by outside parties, or issues related to Native American consultation.

As defined in 36 CFR 800.16(d), an APE is “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” An APE therefore depends on an undertaking’s potential for effects. Effects to be considered may include, but are not limited to, physical damage or destruction of all or part of a property; physical alterations; moving or realigning a historic property; isolating a property from its setting; visual, audible, or atmospheric intrusions; shadow effects; vibrations; and change in access or use.

An APE delineates the boundaries within which it can be reasonably expected that a proposed undertaking has the potential to affect historic properties, should any be present. It may be the right of way itself, or an area either more or less than the right of way, depending on the scope and design of the undertaking.

An APE may extend well beyond the right of way. It must include all construction easements, such as slope and drainage easements, stormwater detention basins, off-site biological mitigation sites requiring ground disturbance, and mandatory borrow and disposal sites. It may include project-related activity areas such as utility relocations, access roads, equipment storage areas, or conservation or scenic easements.

An APE addresses indirect effects when warranted. Indirect effects may extend beyond the right of way to encompass visual, audible, or atmospheric intrusions; shadow effects; vibrations from construction activities; or change in access or use. Delineation of an indirect APE must be considered carefully, particularly for potential audible and visual effects, taking into account proximity and use of adjoining properties, the surrounding topography, and other aspects of a property’s setting.

1. Noise: When considering potential noise effects, there must be a reasonable basis for predicting an effect based on an increase over existing noise level. Noise effects should be considered when a project would result in a new through lane or a substantial change in vertical or horizontal alignment.
2. Visual: Highways on new alignments, multi-level structures, or elevated roadways are considered to have potential for visual effects if they could be out of character with or intrude upon a historic property or isolate it from its setting. Projects for improvement or expansion of existing transportation facilities that will not substantially deviate from existing alignment or profile are not expected to involve visual impacts. If circumstances indicate potential for visual effects, consultation with the SHPO may be warranted.

Different APEs may be established for archaeological and built properties:

1. For archaeological properties, an APE is typically established based on an undertaking’s potential for direct effects from ground-disturbing activities. On occasion, archaeological sites may also have qualities that could be affected indirectly.

2. Buildings, structures, objects, districts, traditional cultural properties, and cultural landscapes are more likely to be subject to indirect, as well as direct, effects, thus an APE for the built and cultural environment is usually broader than an archaeological APE in order to include the potential for such effects. For instance, the first row of potential properties beyond the right of way may be subject to such effects and thus included in an indirect APE when warranted.

In delineating the APE, consideration must always be given to the undertaking's potential effects on a historic property as a whole. If any part of a property may be affected, the APE will generally encompass the entire property, including the reasonably anticipated or known boundaries of archaeological sites. However, it is rarely necessary to extend an APE to include entire large districts or landscapes, large rural parcels, extensive functional systems, or long linear features if potential effects on the whole would clearly be negligible.

The guiding principle on delineating an APE is that it should be commensurate with, and provide for, an appropriate level of effort to take into account an undertaking's potential for effects on historic properties.

While an APE will generally encompass an entire property, physical intrusion such as testing of archaeological sites must be focused on areas subject to reasonably foreseeable effects of the undertaking and should be guided by a project- or site-specific research design. Areas of an archaeological site that are unlikely to be affected by an undertaking should not be tested unless compelling reasons to conduct such testing are provided in the research design.

Whenever an undertaking is revised (e.g., design changes, utility relocation, or additional off-site mitigation areas), Caltrans PQS will determine if the changes require modifying the APE. If an APE proves to be inadequate, Caltrans is responsible for informing consulting parties in a timely manner of needed changes. The APE shall be revised commensurate with the nature and scope of the changed potential effects.

In order to encourage consideration of historic properties early in the planning and design of an undertaking, Caltrans PQS may designate a study area for use in conducting historical studies until an APE can be delineated. A study area should encompass all land that could potentially be included in the final APE. Establishing a study area is especially pertinent to those undertakings subject to a phased identification and evaluation process.